

## SUSTAINABLE CAPACITY ESTIMATION

### Abstract

Various actively probing techniques on a network allow an estimation of the sustainable capacity available in the network. One implementation probes the network using two probe sequences having different loads. Probe estimates associated with each sequence are used to estimate the sustainable capacity in the network. Another implementation probes the network using two probe sequences, in which either the probe packet size or the inter-probe gap are different between the sequences. Calculation of a delay trend for each sequence leads to estimate of the maximum network capacity and the background load on the network. Yet another implementation uses a windowing technique to probe the sustainable capacity in the network. The window size is increased until the network is saturated. The number of bytes transferred within the window during a given time period is an estimate of the sustainable capacity of the network.